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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/762,032

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Steven J. Lenius

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EXAMINER

TADESSE, YEWEBDAR T

ART UNIT

PAPER NUMBER

1734

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/762,032	Applicant(s) LENIUS, STEVEN J.	
	Examiner Yewebdar T. Tadesse	Art Unit 1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The indicated allowability of claims 11-20 is withdrawn in view of the newly discovered reference(s) to E. D. O'Brien (US 3,017,854). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11-12 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by E.D. O'Brien (US 3,017,854).

With respect to claim 11, O' Brien discloses (see Figs 1 and 3, column 1, lines 7-15) a coater capable of preparing coated retroreflective particles, comprising: a disc (plate 96) having a periphery and a major surface; a motor (16) engaging the disc so as to be able to spin the disc; a restrictor (skirt 108) mounted adjacent to the disc so as to provide a gap for the egress of coated particles, wherein the restrictor has a portion having a frusto-conical shape so that the height of the space between the disc and the restrictor diminishes with radial distance from the center of the disc and further wherein the restrictor includes a flange portion extending from the frusto-conical shape substantially parallel to the major surface of the disc; a first dispenser (106) capable of dispensing a mixture of mold particles and polymeric resin, the first dispenser disposed

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above the disc; and a second dispenser (116) capable of dispensing glass beads, the second dispenser disposed above the disc.

With respect to claim 12, in O'Brien the surface of the disc can be made a material comprising a high coefficient of friction relative to the particles (i.e. resilient material, see column 4, line 41).

As to claim 18, in O'Brien the disc (plate 96) is spun by the motor at between about 360-720 rpm (see column 1, line 35 for variable speed of the motor).

As to claim 19, O'Brien discloses (see Fig 3) a coater for spin coating particles comprising: a rotating disc (plate 96) having a surface that engages the particles; a barrier (skirt 108) disposed adjacent the disc surface (96); and a gap created between the barrier and the disc surface, the gap including: a first inner portion that decreases linearly with the radius of the disc, the second portion disposed near the perimeter of the disc.

Regarding claim 20, O'Brien discloses (see Fig 3) a raised structure on the disc surface, wherein the raised structure includes a portion that extends into the gap, whereby coated particles are contacted by the raised structure when the disc is rotating.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

O'Brien (US 3,017,854) as applied to claim 11 in view of Kulling (US 4,740,390).

O'Brien lacks teaching adjustable restrictor, Kulling discloses the gap (58,158) (capable of being 1-3 times the diameter of the particles) between the disc (22,122) and the restrictor (wall 26, 126) is adjustable (see column 4, lines 43-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the restrictor or adjust the size of the gap in order to lead different sizes of particles through the gap or aperture.

7. Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien (US 3,017,854).

In Fig 3, O'Brien lacks teaching a collection bin disposed beneath the disc. However a collection bin disposed beneath the disc (plate 370). It would have been

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obvious to one of ordinary skill in the art at the time the invention was made to include a collection bin in the embodiment of Fig 3 of O'Brien to collect the coated particles as desired.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien (US 3,017,854) in view of Hough (US 3,288,052).

O'Brien lacks teaching a barrier to divert coated particles emerging from the gap. Hough discloses a barrier (annular wall 98) capable of diverting coated particles emerging from the gap into the collection bin (12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a particle dispenser above the disc in Kulling as modified to smoothly direct the particles towards the collection container.

Allowable Subject Matter

9. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: prior art of record does not disclose or suggest the surface of the disc comprising a polymeric foam material with a high coefficient of friction.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yewebdar T. Tadesse whose telephone number is (571) 272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM-4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



YTT



CHRIS FIORILLA
SUPERVISORY PATENT EXAMINER

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